

Amendments to the claims and claim listing. This claim listing replaces all previous versions of the claims.

In the Claims:

1-40. (canceled)

41. (currently amended) A composition comprising a glycosylated interferon-beta-1a comprising the amino acid sequence set forth in [[any-one-of]] SEQ ID NO: 41, [[NOs: 27-56]] coupled to a non-naturally-occurring polymer at an N-terminal end of said glycosylated interferon-beta-1a, said polymer comprising a polyalkylene glycol moiety.

42. (previously presented) The composition of claim 41, wherein the polyalkylene moiety is coupled to [[the]] said interferon-beta by way of a group selected from an aldehyde group, a maleimide group, a vinylsulfone group, a haloacetate group, plurality of histidine residues, a hydrazine group and an aminothiol group.

43. (currently amended) The composition of claim 41, wherein the interferon-beta-1a of [[any-one-of]] SEQ ID NO: 41, [[NOs: 27-56]] is an interferon-beta-1a fusion protein.

44. (previously presented) The composition of claim 43, wherein the interferon-beta-1a fusion protein comprises a portion of an immunoglobulin molecule.

45. (currently amended) A physiologically active interferon-beta composition comprising a physiologically active interferon-beta-1a comprising an amino acid sequence [[selected from the group consisting]] of SEQ NO: 41, [[NOs: 27-56]] coupled to a polymer comprising a polyalkylene glycol moiety, wherein the interferon-beta-1a is coupled to the polymer at a site on the interferon-beta-1a that is an N-terminal end, wherein the physiologically active interferon-beta-1a and the polyalkylene glycol moiety are arranged such that the physiologically active interferon-beta-1a in the physiologically active interferon-beta composition has an activity at least 2-fold greater relative to physiologically active interferon-beta-1b, when measured by an antiviral assay.

46. (previously presented) The composition of claim 45, wherein the interferon-beta-1a is coupled to the polymer at a site by way of a glycan moiety of the interferon-beta-1a.

47. (previously presented) The composition of claim 45, wherein the interferon-beta-1a is an interferon-beta-1a fusion protein.

48. (previously presented) The composition of claim 47, wherein the interferon-beta-1a fusion protein comprises a portion of an immunoglobulin molecule.

49. (currently amended) A physiologically active interferon-beta composition comprising a physiologically active glycosylated interferon-beta-1a comprising an amino acid sequence [[selected from the group consisting]] of SEQ NO: 41, [[NOS: 27-56]] N-terminally coupled to a polymer comprising a polyalkylene glycol moiety, wherein the physiologically active interferon-beta-1a and the polyalkylene glycol moiety are arranged such that the physiologically active interferon-beta-1a in the physiologically active interferon-beta composition has equal activity relative to physiologically active interferon-beta lacking said moiety, when measured by an antiviral assay.

50. (previously presented) The composition of claim 49, wherein the interferon-beta is coupled to the polymer at a site by way of a glycan moiety on the interferon-beta.

51. (previously presented) The composition of claim 49, wherein the interferon-beta-1a is an interferon-beta fusion protein.

52. (previously presented) The composition of claim 51, wherein the interferon-beta fusion protein comprises a portion of an immunoglobulin molecule.

53. (currently amended) A stable, aqueously soluble, conjugated interferon-beta-1a complex comprising a interferon-beta-1a comprising an amino acid sequence [[selected from the group consisting]] of SEQ ID NO: 41, [[NOS: 27-56]] N-terminally coupled to a polyethylene glycol moiety, wherein the interferon-beta-1a is coupled to the polyethylene glycol moiety by a labile bond, wherein the labile bond is cleavable by biochemical hydrolysis and/or [[protoclysis]] proteolysis.

54. (previously presented) An interferon-beta composition according to claim 41, wherein the polymer has a molecular weight of from about 5 to 40 kilodaltons.

55. (previously presented) An interferon-beta composition according to claim 49, wherein the polymer has a molecular weight of from about 5 to 40 kilodaltons.

56. (previously presented) An interferon-beta composition according to claim 53, wherein the polymer has a molecular weight of from about 5 to 40 kilodaltons.

57. (previously presented) A pharmaceutical composition comprising the interferon-beta composition of claim 54.

58. (currently amended) A protein comprising the amino acid sequence set forth in [[any one-of]] SEQ ID NO: 41, [[NOS: 27-56]] coupled to a non-naturally-occurring polymer at the C-terminal end of said protein, said polymer comprising a polyalkylene glycol moiety.

59. (currently amended) A protein comprising the amino acid sequence set forth in [[any one-of]] SEQ ID NO: 41, [[NOs: 27-56]] coupled to a non-naturally-occurring polymer, said polymer comprising a polyalkylene glycol moiety, and said polymer is attached to an amino, carboxylic, hydroxyl, guanidyl, or glycan moiety of said protein.

60. (currently amended) A protein comprising the amino acid sequence set forth in [[any one-of]] SEQ ID NO: 41, [[NOs: 27-56]] coupled to a non-naturally-occurring polymer at the N-terminal end of said protein, said polymer comprising a polyalkylene glycol moiety.

61. (Canceled).

62. (currently amended) A method of preparing the protein of claim 60, comprising reacting a protein with a non-naturally-occurring polymer under reductive alkylation conditions, said protein comprising the amino acid sequence set forth in [[any one-of]] SEQ ID NO: 41, [[NOs: 27-56]] and said polymer comprising a polyalkylene glycol moiety and a terminal aldehyde moiety.

63. (new) An interferon-beta composition according to claim 45, wherein the polymer has a molecular weight of from about 5 to 40 kilodaltons.

64. (new) An interferon-beta composition according to claim 41, wherein the polymer has a molecular weight of about 20 kilodaltons.

65. (new) An interferon-beta composition according to claim 45, wherein the polymer has a molecular weight of about 20 kilodaltons.

66. (new) An interferon-beta composition according to claim 49, wherein the polymer has a molecular weight of about 20 kilodaltons.

67. (new) An interferon-beta composition according to claim 53, wherein the polymer has a molecular weight of about 20 kilodaltons.

68. (new) An interferon-beta composition according to claim 41, wherein the polymer has a molecular weight of about 5 kilodaltons.

69. (new) An interferon-beta composition according to claim 45, wherein the polymer has a molecular weight of about 5 kilodaltons.

70. (new) An interferon-beta composition according to claim 49, wherein the polymer has a molecular weight of about 5 kilodaltons.

71. (new) An interferon-beta composition according to claim 53, wherein the polymer has a molecular weight of about 5 kilodaltons.